

## AMENDMENTS TO THE CLAIMS

**1- 20. (Canceled)**

**21. (Currently amended)** A method of identifying presence of nephritis in a mammal at an early stage before formation of glomerular crescent or deposition of immunoglobulins, comprising:

- obtaining a biological sample of frozen kidney tissue from the mammal;
- exposing the sample to anti-noncollagenous domain of type IV collagen (NC1) monoclonal antibody, wherein said antibody exhibits substantially more binding to glomeruli of macaques in which nephritis has been induced by anti-glomerular basement membrane (GBM) antibody than to glomeruli of normal macaques; and
- identifying binding of the antibody to antigen present in the sample, wherein significant binding indicates presence of nephritis in the mammal.

**22-25. (Canceled)**

**26. (Previously presented)** The method according to claim 21, wherein identifying binding of the antibody comprises an immune reaction assay.

**27. (Previously presented)** The method according to claim 21, wherein identifying binding of the antibody comprises an Enzyme-Linked ImmunoSorbent Assay (ELISA) assay.

**28. (Currently amended)** The method according to claim 21, wherein identifying binding of the antibody comprises an assay selected from the group consisting of an avidin-biotin (AB) method, a radioimmunoassay (RIA) method, and an immunoluminescence method, ~~a precipitation method, and an agglutination method~~.

**29. (Previously presented)** The method according to claim 21, wherein identifying binding of the antibody comprises immunofluorescent staining.

**30. (Previously presented)** The method according to claim 21, wherein the presence of nephritis is identified before granular deposition of IgA into renal glomerular basement membrane (GBM) of the mammal.

**31. (Canceled)**

**32. (Previously presented)** A method of identifying presence of nephritis in a mammal, comprising:

- obtaining a biological sample from the mammal, wherein said sample is a frozen kidney tissue of the mammal;

- exposing the sample to anti-noncollagenous domain of type IV collagen (NC1) monoclonal antibody, wherein said antibody is configured to have a substantially higher affinity to a frozen kidney tissue obtained from a mammal under condition of nephritis than a frozen kidney tissue obtained from a mammal under a normal condition;

- identifying binding of the antibody to antigen present in the sample, wherein significant binding indicates presence of nephritis in the mammal,

wherein said method is configured to identify presence of nephritis at an early stage, said stage being before formation of glomerular crescent.

33. **(Currently amended)** A method of identifying presence of nephritis in a mammal, comprising:

- obtaining a biological sample from the mammal, wherein said sample is a frozen kidney tissue of the mammal;

- exposing the sample to anti-noncollagenous domain of type IV collagen (NC1) monoclonal antibody; and

- identifying binding of the antibody to antigen present in the sample, wherein significant binding indicates presence of nephritis in the mammal,

wherein said method is configured to identify presence of nephritis at an early stage, said stage being before formation of glomerular crescent; and

wherein said antibody is selected via a process comprising:

obtaining a biological sample that is sectioned from frozen kidney tissue of a mammal;  
and

selecting an anti-noncollagenous domain of type IV collagen (NC1) monoclonal antibody  
that binds to a frozen kidney tissue obtained from a mammal under condition of nephritis but not  
to a frozen kidney tissue obtained from a mammal under a normal condition.

34. **(Canceled)**

35. **(Currently amended)** The method according to claim 21, wherein the subject mammal has symptoms of anti glomerular basement membrane (GBM) antibody nephritis.

36. **(Currently amended)** The method according to claim 32, wherein the subject mammal has symptoms of anti glomerular basement membrane (GBM) antibody nephritis.

37. **(Currently amended)** The method according to claim 33, wherein the subject mammal has symptoms of anti glomerular basement membrane (GBM) antibody nephritis